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Discursive Representations of Controversial Issues
in Medicine and Health

La rappresentazione discorsiva di questioni controverse
in ambito medico e sanitario

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EDITORIAL

Discursive Representations of Controversial Issues in Medicine and Health 5

Giuliana Elena Garzone, Maria Cristina Paganoni, and Martin Reisigl

Discourse Strategies of Fake News in the Anti-vax Campaign 15

Stefania Maria Maci

“Facts” and “Feelings” in the Discursive Construction of the “Best Interests of a Child”: The Charlie Gard Case 45

Judith Turnbull

“Designer Babies” and “Playing God”: Metaphor, Genome Editing, and Bioethics in Popular Science Texts 65

Elisa Mattiello

Exploring Health Literacy: Web-based Genres in Disseminating Specialized Knowledge to Caregivers. The Case of Paediatric Neurological Disorders 89

Silvia Cavalieri and Giuliana Diani

Governing (Their) Bodies: A Linguistic Perspective on the Deterrence vs. Education Debate within the Anti-doping Community 107

Dermot Brendan Heaney

An Inquiry into Discursive News Coverage, Popularization and Presuppositions Concerning Military PTSD Treatment Options <i>Roxanne Barbara Doerr</i>	131
Authors / Autori	153

Governing (Their) Bodies: A Linguistic Perspective on the Deterrence vs. Education Debate within the Anti-doping Community

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Anti-doping has been dominated by detection-deterrence directives. This has given rise to the dramatic, yet ultimately futile, 'cat and mouse game' that characterises contemporary anti-doping in sport.

Susan Backhouse, 2013

ABSTRACT

Currently, a central debate within the anti-doping community concerns the balance between information used for the purposes of deterrence and/or education. Some experts in the field now claim that there has been overreliance on the former and that substantive educational strategies have not been implemented. Their argument is that the coercive orientation has failed to curb doping among athletes to the desired extent and that the time is ripe for a more educational approach in providing information to athletes about this issue, because in their view the only way to change attitudes to doping is through processes of reach-out, awareness-building and engagement. Despite the obvious centrality of language in the enterprise, be it in a coercive or educational spirit, there is an evident dearth of contributions from linguists to the debate. The following study considers the question from a linguistic perspective. To do this it adopts a corpus linguistic approach. Firstly, it draws on a corpus of anti-doping information available on the websites of five governing bodies and anti-doping agencies, using keyword analysis of lexis to assess the ratio of coercive to educational orientations within the data; secondly, using micro-analysis of the key function word category of pronominal reference, the study identifies both a coercive orientation and a commitment to interaction and engagement in the corpus of texts analysed.

Keywords: anti-doping campaigns; corpus-assisted analysis; deterrence; education; function words; key words; lexis.

1. INTRODUCTION

In an editorial for the then *International Network of Humanistic Doping Research (INHDR)*¹, Giselher Spitzer and Elk Franke (2010, 3) claim that there is “a burgeoning awareness in relevant funding bodies that the detect-and-punish approach to anti-doping needs to be complemented by humanistic and social sciences approaches”. However, in the 23 issues of the *Network’s* newsletter, between June 2012 and December 2017, just one contribution is explicitly concerned with the role of language in this enterprise. In “Seeking an Alternative to Clean”, Henning (2017) expresses dissatisfaction with the wide use of the metaphor ‘clean’ in debates about doping, claiming that it is “a complex, subjective, and often problematic concept through which to discuss doping and enhancement”. Presumably, a scholar of conceptual metaphor (see, for example, Lakoff and Johnson 1980; Stein 2007; Semino 2008) could help to pinpoint and illustrate the problematic nature of ‘clean’ within the context of anti-doping discourse, a promising topic for another paper, though for the moment it lies outside the scope of this one. More generally speaking, too, Henning is probably right, though she is forced to admit there is much work to do, work that could presumably benefit from the involvement of linguists, from different areas of specialization who share an interest in the issue of performance enhancement within sport:

Clarifying what we are really talking about when we talk about doping, shifting the scope of our discussions to hold all stakeholders to account for the current state of sport, and prioritizing athlete health require a more specific and less judgmental vocabulary and narrative. We need to move beyond the limits of clean if we are to better understand doping and improve on strategies for addressing it.

Nevertheless, as things stand, linguistic analyses of this often sensational aspect of the bioethical debate are few and far between and, with rare exceptions (see Meier, Rose, and Hölzen 2015), anti-doping research is

¹ Now the *International Network of Doping Research (INDR)*, though this does not seem to have altered the proportion of contributions from linguists.

carried out predominantly by medical and sports scientists, sports philosophers, ethicists, sports historians, social scientists, and exponents of the administrative sciences.

The following analysis is intended to illustrate how linguistic analysis can contribute to research in this field, by following up leads and intuitions from experts in other disciplines, or by providing more nuanced accounts of the role of language in this bioethical issue.

2. LINGUISTICS AND CURRENT ANTI-DOPING RESEARCH

In line with the above agenda, this paper takes its cue from the observations of Backhouse (2013) concerning the manner in which anti-doping campaigns are pursued by sports governing bodies and doping agencies:

The disproportionate allocation of funding to developing detection methods – and to developing detectives – means that education has a very limited evidence base from which to design effective anti-doping education. The bias towards testing and compliance is also underscored by the scant attention paid to education in the Code² and the absence of an International Standard for education. (Backhouse 2013, n.p.)

Such a claim extends an invitation to the linguist on two counts: (1) to verify the ratio of proscriptive to educational anti-doping information that governing and sports bodies actually make available to athletes; (2) to identify linguistic strategies used in pursuit of both these initiatives and evaluate their effect from a linguistic perspective.

2.1. *Background: WADA and the birth of the anti-doping era*

The war against doping in sport has only been waged seriously since the inception of the World Anti-Doping Agency (WADA) in 1999 which, in the view of many commentators (see, for example, Hanstad, Smith, and Waddington 2008), came as a direct response to the so-called Festina scandal that broke out in the 1998 *Tour de France* and revealed

² This refers to the *World Anti-Doping Code* “the core document that harmonizes anti-doping policies, rules and regulations within sport organizations and among public authorities around the world” (WADA 2015).

widespread, systemic doping within the sport of cycling and the ineffectiveness of the anti-doping measures and procedures in place at that time. Up until that point, anti-doping regulations and testing had been the remit of the International Olympic Committee (IOC), but the sheer scale of the Festina affair revealed that the IOC was unequal to the task.

The reign of the IOC president Juan Antonio Samaranch (1980-2001) has been widely stigmatized for encouraging a permissive culture within the IOC, which has been accused of turning a blind eye to doping within sport because the meaningful countermeasures that would have exposed numerous athletes would also have driven away corporate sponsors. A clampdown would also have impeded the spectacular record-making performances that were increasingly the stuff of media sports coverage. In truth the IOC merely paid lip service to anti-doping because, as Hoberman (2001, 242) puts it, “doping was primarily a public relations problem that threatened lucrative television and corporate contracts”.

The Festina affair seriously dented the IOC’s credibility and precipitated a conference in Lausanne in 1999, in which Samaranch and his associates intended to reassert the committee’s credentials as the world’s preeminent anti-doping body and champion. It has been pointed out that the conference was not just an attempt to retake the moral high ground; it was also last-ditch battle to maintain a fiefdom. Unless the IOC could assume and convincingly wear the mantle of absolute anti-doping authority, it risked encroachment from other authorities, as had happened during the 1998 *Tour de France*, where its total dereliction of doping duty had opened the door to police intervention and actions by the legal representatives of the French state, which rightly saw itself as damaged by the doping culture that was rife in this symbolic national sporting event. Despite the IOC’s attempt to pack the conference with pro-Samaranch delegates, it failed to withstand attacks from the representatives of governments who combined to force the IOC to relinquish its claim to control of world anti-doping. The upshot of the conference was the creation of a new anti-doping authority “composed equally of representatives of governmental organisations and sporting bodies” (Council of Europe 1999), an independent body, which establishes and maintains “unified standards for anti-doping testing and the imposition of sanctions for doping violations, and seek[s] to coordinate the efforts of sports’ organisations and governments to combat doping in sport” (David 2008, 2). Since its establishment WADA has “sought to build a wider acceptance throughout the global sporting community for a standard approach to the detection and punishment of doping [...] and

developed the Code, in pursuit of its main objective of developing harmonised rules, disciplinary procedures and sanctions” (David 2008, 2).

2.2. *The issue: detection and deterrence vs. education*

To answer the research question prompted by Blackhouse’s (2013) observations, it is necessary to define more clearly what is meant by the terms ‘education’ and ‘deterrence’ in this particular communicative context. Under the heading of ‘Education’, The Council of Europe Anti-doping Convention (2012, 8) states “[p]reventing doping in sport involves raising awareness of the pertinent issues and concerns, disseminating relevant and accurate information, and positively influencing beliefs, attitudes and behaviours”. In this interpretation, educational communication goes beyond supplying information and involves changing attitudes and behaviours. The same document (2012, 8) also states that the Council shares the primary goal of the Code (see section 2.1), namely “dissuading athletes from using prohibited substances and methods”. Thus, a three-pronged educational orientation is adumbrated. Westmattmann *et al.* (2018, 4) also identify three distinct traditional orientations to anti-doping education: knowledge-based, attitudinal, and what they term the “scared based approach”. Trabal (2014, 16) associates education with both information and awareness-building, though he stresses that the two are often confused and conflated in the anti-doping communications of governing bodies international institutions. Therefore, in the present analysis ‘educational’ refers to those aspects of communication that redress a knowledge deficit and aim to build awareness, while ‘deterrence’ covers those strategies underlining risks and negative consequences of athletes’ decisions and behaviours.

As has been seen, neither detection nor deterrence were priorities under the aegis of the IOC. Hourihan (2003, 211) is dismissive of this body’s commitment to educational programmes pre-1999. Indeed, he describes how these frequently backfired, because they were regularly accessed by athletes for information “to gauge when to stop taking banned substances in time to clear their systems”. It is true that one of the IOC’s working groups at the ill-starred 1998 conference was entitled *Prevention: Ethics, Education and Communication* (see Handstadt, Waddington, and Smith 2008), but this never got off the drawing board, as the IOC spectacularly ceded its anti-doping remit to WADA the following year. In David’s (2008, 2) introduction to WADA’s code the empha-

sis is firmly on “a standard approach to the detection and punishment of doping”. This apparently narrow focus is, at the very least, understandable in the light of the IOC’s shortcomings in this area.

Nevertheless, despite this more cohesive anti-doping crusade, there is still much disagreement within the anti-doping community about whether increased deterrence has succeeded in rooting out doping within sport. Fairly recent sensational events have suggested it has not. Chief among these are the doping scandals that have tainted both the Russian Winter Olympic and Olympic teams, leading to IOC bans for Russian athletes both from the Rio Olympics³ and from the current edition of the Winter Olympics in South Korea⁴. The fact that heavily monitored elite athletes from a range of sports periodically prove positive in doping tests has provided added fuel for those arguing against the culture of “all out repression” (Kayser, Mauron, and Miah 2007, 1).

At one extreme, opponents of the current anti-doping regime point out that, far from guaranteeing a level playing field for all athletes, it actually increases inequalities because it penalises all but those athletes “who do not have the best ‘rogue’ scientists working for them” (*ibid.*, 3). Moreover, it is claimed that the concentration on elite athletes within the professional sports ignores amateur sports, “where the available evidence clearly indicates continuous use of performance enhancing substances” (*ibidem*). Opponents of doping legalisation argue that ultimately it will be safer for athletes and that “taking doping out of hiding may have positive effects beyond the restricted world of elite sports” because “the practices in the amateur sports world might become less hazardous and thus overall incidence of health problems from doping use might actually decrease” (*ibid.*, 8).

Even the most convinced anti-prohibitionists recognise that this scenario is unlikely and that “in the current political climate there is hardly any interest in re-evaluating the ethical foundation of doping” (*ibidem*). Nevertheless, there is recognition that deterrence alone is not working:

³ Details about this scandal are available in the BBC (2017) documentary on the whistleblower Yuliya Stepanova.

⁴ For a detailed account see the documentary *Icarus* (Fogel 2017) based on the revelations of the former director of RUSADA (The Russian Anti-Doping Agency) Grigory Rodchenkov, who makes detailed allegations about the agency’s part in the organized and systematic doping practiced by the Russian team at the Sochi Winter Olympic Games.

Anti-doping education also continues to be dogged by a lack of resources; it is imperative that education delivers not only effective approaches but also confirms that these programmes are delivered in the best possible ways. Without this evidence, sports' unwary – but well-meaning – agencies may continue to focus on delivering key messages about compliance. (Backhouse 2013)

Nor does the call for greater education come exclusively from outside WADA. Former WADA Director General David Howman (BBC 2015) has also emphasised the need for greater awareness-building and outreach initiatives:

I think the area of most concern for us is the level of young athletes who have not broken through into the elite, and we're primarily responsible for the elite athletes, who are trying to get their breakthrough and are susceptible to taking drugs because that's a short cut. And not only are they susceptible, they're being encouraged to do so by anyone of the number of people that surround them: coaches and trainers, even parents, because it's a way to make a lot of money [...]. They're very vulnerable because they're the people who are not tested; they're the people who are well under the radar of WADA, but certainly well under the radar of the national anti-doping agencies. So you've actually got to start looking at this as a bigger societal issue and certainly using all the tools of education that we can possibly [...]. What we really have to rely on is the athletes themselves. We must make sure the athletes want to go out there and compete clean and we must give them, every encouragement to do so.⁵

Another criticism of anti-doping procedures is that they are hardly cost-effective, resulting in “a programme of intense intrusive health surveillance for the few, which makes no sense in terms of public health” (Kayser, Mauron, and Miah 2007, 8). In the same interview quoted above, Howman points out that the agency's annual budget for anti-doping tests and procedures is equivalent to the annual wage of just one of Manchester United's star players. In such a context communication incurs less costs. This brings us back to the purpose of this paper, namely, to consider the extent to which agencies and sports governing bodies exploit the soft tool of language on their websites, both for the purposes of deterrence and education.

⁵ Transcript of statement made during the BBC World Service interview programme *HARDtalk*, 24/07/2015.

3. A CORPUS-ASSISTED APPROACH⁶

Meir *et al.* (2015) have the distinction of producing possibly the only corpus-based linguistic study of anti-doping discourse. The present study reflects their views about the usefulness of CL methods, which:

[...] avoid the pitfalls of many qualitative approaches, that is, arbitrary selection of texts and a small number of analysed segments. In contrast, CL allows for the processing of large amounts of text data and enables a higher degree of objectivity. CL can also pinpoint areas of interest for further/closer analysis by identifying emerging patterns and leading to examination of concordance. (2015, 7)

Once the data had been gathered (see section 3.4), it was accessed using the tools on the concordancing software Antconc 3.4.4w (2014). The first stage was to establish the “key words” in the data set. This helps the analyst establish the “aboutness” of linguistic data (see Baker *et al.* 2008), in other words, “a quality words may have in a given text, or set of texts, suggesting that they are important, they reflect what the text is really about” (Scott and Tribble 2006, 73). For a word to be key it must be “outstandingly frequent in terms of a reference corpus” (Scott and Tribble 1996, 59). The reference corpus in this instance was composed of online newspaper articles on anti-doping agencies and sports governing bodies. Comparison of the corpus composed of anti-doping information on agencies and sports bodies websites with the reference corpus of news reports will throw up words that are ‘key’, namely, “a word-form which is repeated a lot within a text” (Scott and Tribble 2006, 58). This procedure is helpful in providing a broad outline of the ratio of deterrence and educational discourses present on anti-doping agency and governing body websites.

3.1. *Analytical methods*

As Meir *et al.* (2015, 5) point out, “CL encompasses a great variety of approaches for studying language use”. Given the research question underpinning this study concerns the nature of the relations between governing bodies and agencies and athletes, and whether they are pre-

⁶ This section is principally of interests to non-linguists who may be unfamiliar with CL methods and approaches.

dominantly coercive or educational, the analysis naturally falls within that sphere of Critical Discourse Analysis (CDA) concerned as it is with identifying the creation and maintenance of power relations through texts (see Fairclough 1989; Bloor and Bloor 2007, 85). Thus, following the lead of Barron (2012), micro-textual analysis of the basic data provided by keyword selection reflects CDA's concern with the relations that are discursively constructed between the sender (governing bodies/agencies) and the addressee (athletes), using discursive processes of individualization like synthetic personalization (Fairclough 1989, 52) and the "construction of sender-addressee interaction" (Barron 2012, 181) as a way of individualising impersonal communication in the context of mass communication (see Nord 2002, as cited by Barron 2012). Such a perspective will entail a focus on "address indicators" (Nord 2002), particularly second-person pronominal reference, directives and questions (see Barron 2012, 181). The more so, because pronominal reference (second and first-person and also 'what') are very highly ranked in terms of keyness in the corpus and, as such, warrant special attention.

3.2. *WADA signatories and corpus design*

Organisations that can accept the Code as signatories include "the International Olympic committee, national Olympic committees, the international Paralympic committees, international federations national anti-doping organisations and major event organisations", while "national sporting organisations and their members become bound to the Code through agreements made by signatories which adopt the Code, such as international federations and national doping organisations" (David 2008, 3). This system has implications for the selection of data for linguistic analysis. The manner in which national federations, national anti-doping agencies and international federations are now locked into a cohesive anti-doping culture overseen by WADA, means that it is easier for the analyst to select representative data for analysis of how language is used in the WADA-led crusade against doping.

Undoubtedly the two sports most closely associated with doping scandals are cycling and athletics⁷. Each has a long list of fallen idols

⁷ It is no coincidence that the recent Parliamentary Select Committee investigation into doping in British sport focussed on these two sports (House of Commons 2018); see also Westmattmann *et al.* 2018.

who have been stripped of medals or titles, lost their reputations, thrown their sports into disrepute, and also prompted re-thinks of anti-doping policy. A corpus of anti-doping guidelines, advice and awareness-building texts taken from the websites of UKAD (United Kingdom Anti-Doping) and WADA and the UCI (Union Cycliste Internationale), British Cycling and UK Athletics was assembled.

The texts selected were accessed from headings on the website navigation bars that indicated information for athletes. Although multi-modality is also used to provide anti-doping information, this study focuses on written texts alone, either as html texts or as documents, and leaflets in downloadable pdf format, subsequently converted into txt format to run on the concordancer software. The web pages of federations and agencies often contained links to the website of WADA, whose anti-doping code and protocols are now accepted and applied by national sports governing bodies through their international federations. This selection process was felt to provide sufficiently representative data for analysis.

The resulting corpus was of 120,813 tokens. A control corpus of newspaper reports on the activities of anti-doping bodies and governing bodies extracted from the Lexis Nexis data bank was used, which provided a corpus of 124,746 tokens. The key word list cut off 200, which provided sufficiently interesting data for some preliminary reflections.

4. KEYWORD ANALYSIS: “ABOUTNESS” AND “HOWNESS”

As Scott and Tribble (2006, 56) colourfully put it, “what the text boils down to is it’s keyness, once we have steamed off the verbiage, the adornment, the blah blah blah”. Keywords are basically identified because they are repeated a lot, but raw frequency alone does not confer keyness. For that comparison with a reference corpus is required, and “for a word to be key [...] it must be outstandingly frequent in terms of a reference corpus” (Scott and Tribble 2006, 59). Scott and Tribble (*ibid.*, 64) point out that “core KWs have largely but not exclusively to do with what the text is about; a few others are usually found which reflect some stylistic feature”. As will be seen, a high proportion of keywords in the node corpus (in other words, the corpus we are exploring) are lexical items that point to the “aboutness” of the node corpus. There are also a significant number of non-lexical, function words in very key positions, and

these appear closely involved in the stylistic features of the corpus. We might say that such words provide pointers to aspects of the “howness” of this data; namely, how the lexical information is conveyed. Prominent among the functional keywords are second- and first-person pronominal references; wh-question-forming words and question-forming auxiliaries, which may point to personalised-type communication or to the simulation of interaction between governing bodies and athletes.

4.1. Lexical “aboutness”

At a lexical level, the “aboutness” of this corpus can be mapped out in key semantic fields, which can be conveniently summarized in a table that indicates the percentage of each semantic domain represented among the lexical key words.

Some of the lexical items overlap in different fields, in which case their various meanings were separated so they could be divided between various semantic fields. Other lexis, particularly adjectives like ‘specific’, ‘relevant’ or ‘appropriate’, while key, were scattered over various domains and necessitated a ‘various’ category, which included some other lexical words that proved equally difficult to pigeonhole.

From this overview, it is evident that the main semantic fields rank as follows:

Table 1. – Keyness ranking of separate semantic fields.

KEYNESS	SEMANTIC FIELD	PERCENTAGE	
1	Testing procedures	23%	52%
2	Disciplinary procedures and measures	15%	
3	Regulations	14%	
4	Various	12%	
5	Education-information	10%	18%
6	Ethical values	8%	
7	Bodies-agencies	6%	
8	Sport	5%	
9	Substances	5%	

Table 1 indicates a noticeable bias towards information about the testing and disciplinary procedures athletes are expected to know about. Together, as shown in column four, the three relevant semantic fields

(testing procedures, disciplinary procedures and measures/regulations) account for 52% of the key lexis, within the 200 cut-off. The other main related semantic group is comprised of education and ethical values, jointly accounting for 18% of the information (see column four). This strongly suggests that regulations and disciplinary measures are the priority, while education and ethos-building are not so advanced or developed at this stage, though they are present to a significant degree. However, as will be seen in the following section, this is not the whole story, as much of this lexis is underpinned by functional language that may also reflect a commitment to the educational function. Thus, if we are to have a more accurate picture of the ratio of the deterrence-educational orientations within the corpus as a whole, key functional language also has to be factored into the analysis.

4.2. Functional “bowness”

Various Function words were key in this corpus. When the lexical words were removed from the key word list, the remaining functional words were ranked as shown in *Table 2*.

Table 2. – Rankings of function words in terms of keyness.

RANKING	FREQUENCY	N-SCORE	WORD
1	1,990	1,535.762	or
4	1,077	761.116	you
6	542	612.007	your
8	346	461.509	shall
19	555	267.553	any
23	483	245.553	may
28	1,346	211.429	be
30	601	196.862	if
35	475	158.676	other
36	917	146.048	are
56	439	114.575	what
67	1,028	110.602	an
71	292	103.032	should
75	444	98.401	can
82	3,938	93.761	to

RANKING	FREQUENCY	N-SCORE	WORD
90	1,517	86.454	is
93	193	84.485	must
107	639	72.397	this
117	149	66.381	me
119	3,139	65.757	and
127	162	63.494	need
133	64	60.414	unless
170	514	45.519	will
175	129	42.550	my
176	191	42.921	such
177	180	42.550	where
193	82	39.264	always
199	65	38.404	am

The distribution of these key functional words in terms of grammatical categories is shown in *Table 3*.

Table 3. – Percentage rankings of function language types.

RANKING OF FUNCTIONAL LANGUAGE CATEGORY	CATEGORY	%
1	Pronomial reference	27
2	Modals	23
3	Forms of ‘be’	15
4	Conjunctions	15
5	Determiners	8
6	Adverbs	8

The focus of the following analysis will be on the first-ranked category of function word, because it is recognized as being most closely involved in conveying the websites’ orientation towards athletes through the simulation of interaction (see Baron 2012, chapter 6). Modality, as the expression of possibility, advisability and obligation is also certainly involved in conveying an interactive orientation between the text producer and the text receiver, as are the forms of the verb ‘to be’, often used in the formation of more interactive language (for example, in forming questions). Nevertheless, it is expected that the present focus

on pronominal reference will provide sufficient preliminary pointers to the kind of orientation adopted by official websites in communication with their users and go some way to answering the research question that underlies this study. Conjunctions, determiners and adverbs, on the other hand, are more ‘opaque’ and thus less indicative of text producer-text receiver orientation.

4.2.1. Pronominal reference: second person

The second person pronominal reference forms ‘you’ and ‘your’ are not only respectively the second and third highest ranked function words, but they are among the highest ranked of all key words. ‘You’ (1077) appears in 78 files of the 92 files in the corpus. ‘Your’ (542) appears in 64 files (see *Table 4*). Both are more concentrated in the WADA sub-corpus, with more obvious bursts, or concentrations, in the ‘reference guide file’ (166-167 hits). Nevertheless, the plots⁸ for both of them showed they are distributed regularly across the four sub-corpora. These examples of direct address alone are indicative of a pronounced interactional component, or what Barron (2012, 32) calls an “addressee orientation”, in which “second person pronominal reference is used [...] to personalise messages by creating the impression that the citizen at home is personally known to and addressed by the sender [...] in other words, it functions to imitate a personalised dialogue between the sender and the addressee” (*ibid.*, 183).

Table 4. – Keyness of pronominal reference in the corpus.

TOKEN	KEYWORD RANKING	FREQUENCY	PLOT/92
4	You	1077	78
6	Your	542	64
56	What	436	54
117	Me	149	25
175	My	129	10

⁸ ‘Plots’ are the software function on the concordance software that visualise the distribution of a word across the individual texts comprising the entire corpus.

Nord (2002, 149) has identified pronominal reference, particularly in the second-person, as an important “address indicator” involved in the construction of sender-addressee interaction, especially in the context of advertising. However, subsequent literature (see Barron 2012 for a review) has shown how such advertising techniques and others, like directives (see Scollon 2004) and questions (see Jucker 2005,) have been adopted and adapted for the purposes of social education campaigns and other forms of citizen address. The high keyness of two of these indicators (pronominal reference and questions) in the node corpus indicates that these address indicators have become consolidated techniques in other domains, too; so much so, indeed, that it is “increasingly difficult for the lay person to distinguish between campaigns funded by profit organisations and non-profit organisations” (Barron 2012, 276) – see also Röttger 2009.

4.2.2. Pronominal reference: first person

These are not the only pronominal references within the 200 key word threshold: we find ‘me’ ranked 117 (149 hits) and ‘my’ ranked 175 (129 hits). On closer examination, there are 25 plots for the former: the majority (89) of these are contained in the UKAD sub-corpora and refer to the *100%Me* education programme (which suggests a tendency to repetition, aimed perhaps, at inculcation). The remaining examples occur in the WADA Teacher Guide file, in the form of self-assessment tasks that WADA encourages teachers to set their students, as can be seen in the following example.

Example 2. Concordances lines for ‘me’ from the WADA Teacher Guide file of the corpus.

. If I do not respect others, they will not respect me and, if others do not respect me, it will make it difficult will not respect me and, if others do not respect me, it will make it difficult for me to respect them. If no rs do not respect me, it will make it difficult for me to respect them. If no one has the courage to stand up : playing well. I encourage others to cheat with me or not to play fair. Fun and joy Playing my favourite sport Fun and joy Playing my favourite sport makes me happy. I always have fun, whether I am winning or on the field alone. We win as a team that make me look good and we lose as a team. but isn't really I at team mates because they aren't as good as me. Dedication and commitment I am dedicated to my sport a If and other participants I don't let others treat me badly. I help my team mates and opponents up if they fall. te against other players who are different from me. I do not play with people who are not as skilled as

On closer inspection, the file view function of the concordancer shows that these are part of self-awareness building lessons, intended to lead young athletes to understand their own approach to sports and to instil

ethical values. In fact, they are preceded by the following lesson guide for teachers:

Note: As in Lesson 1, students can complete the blank table (individually or in small groups), or you could provide them with the completed table below and simply discuss/explain the contents (in a plenary session or in small groups).

The layout of the original concordance lines is as follows:

Example 3. Layout of WADA Teacher Guide file.

Ethics, fair play and honesty
I expect others not
to cheat. I expect
others to keep
promises made to
me.

These examples illustrate how closely this key function word is involved in attempts to prompt awareness by involving young athletes themselves in a simulated process of introspective reflection, presumably meant to lead them to evaluate and define more precisely their own attitudes to the issue (what is more, this process is facilitated by the use of the kind of idiomatic and simple lexis that is immediately accessible to young people).

'My' (175-129) has a similar distribution and overlaps with 'me' in the Teacher Guide file. However, the plot function shows that it also occurs in the UCI sub-corpus in the FAQs files, and in the UKA corpus, where it simulates questions about themselves from the young athletes to various authority figures. The next sample stretches across all three of these sub-corpora.

Example 4. Concordance lines for "my".

What should I do if I am injured or ill and my GP prescribes a medication on the Prohibited List? You may need a . Visit the ADAMS website. How can I reset my ADAMS password? On the ADAMS log in screen, click the "Forgot existing pool but wish to retire" what are my options? If you are in the NRTP, IRTP or DTP and considering mingham, B42 2BE How can I help protect my sport? We would encourage individuals with information relating to possi in line with what I believe in? What would my sporting hero do in the same situation? What are the consequences of on is free from banned substances: What if my doctor says I need to take medication that contains a banned substance? Ask them these questions: 1 Have you told my doctor I am an athlete? 2 Have you checked the medicine cabinet for or any banned substances? 3 Do you know my responsibilities as a clean athlete? 4 Have you spoken to my coach about s as a clean athlete? 4 Have you spoken to my coach about how you should be supporting me? 5 Are you aware of I should be eating to meet the demands of my training? Parents can find more information on our website or on UKAD' ownload the Clean Sport App and use the 'My Medications' function where you can add any medications you are, or have the Clean Sport App, then you can use the 'My Medications' function to record these. You can ask the Doping Control Pe

In this sample of concordance lines a further strategy stands out, namely, the use of questions to increase young athletes' direct involvement in the issue. Three distinct types are present: (a) direct questions ("How can I reset my ADAMS password?") to a simulated, personified interlocutor (the governing federation / drug agency), which is in a position of authority and thus provides authoritative answers to questions from the athlete (e.g. "On the ADAMS login screen, click on the Forgot Password link and enter your username"); (b) simulated questions that athletes put to themselves ("What would my sporting hero do in the same situation?"); (c) questions that simulate an interaction between athletes and their parents ("Have you spoken to my coach about how you should be supporting me?").

Additionally, this sample also provides a clear example of how first- and second-person pronominal reference combine in the simulation of question-answer interaction. From the same set of concordances it is also evident that 'you' (see section 4.2.1) is not used exclusively in one direction, that is, from authority to athlete, but it also simulates athlete to authority and to parent, with athletes initiating the question-answer sequence and indeed holding the interlocutor to account. This sample of concordances across three sub-corpora has revealed a repertoire of linguistic involvement techniques centred on pronominal references, particularly through a variety of question-answer interactions. The potential effects of questions will be discussed in greater detail in the next key pronominal reference to be analysed, namely, 'what' and its recurrent use in the formation of 'wh-questions'.

4.2.3. 'What' questions

Wh-questions "open with a wh-word which indicates an element to be specified by the addressee" (Biber *et al.* 1999 and 2004). Moreover, "wh-questions elicit more explanatory answers" (Barron 2012, 224), which in itself suggest that this question type is more suited to an educational purpose. *Example 3* above also furnishes examples of the use of 'what' (ranked 56 with 439 occurrences in 54 of the files in the corpus) which features in some of the first-person questions that athletes 'pose' to those in authority. The cluster function (with the left setting) shows that it occurs frequently in wh-type questions in 6 out of the first 10 ranked collocations, with "what is" the most frequent (with 84 hits) distributed over 17 files.

Various scholars have pointed out that the simulation of a question from an institution to a citizen can increase the involvement of the latter in an education programme or awareness-building campaign. “A question can push the citizen to grapple with the message for a moment” (see Sowinski 1998, cited in Barron 2012, 221); or, to adopt Leech’s words, it “may have the effect of rousing the recipient from a wonted state of passive receptivity” (1996, 11). Further, as Barron suggests, it may “may demand silent thought”. Wh-questions can also have the function identified by Biber *et al.* (1999, 213) – albeit it in academic prose – of: (a) suggesting questions the addressee should put to themselves as part of the learning process; (b) focusing attention on particular aspects. As such, they would appear to embody an educational function, enacting that ‘leading out’ which is part of the very etymology of the word. What is more, the corpus provides evidence that a significant number of ‘what’ questions simulate enquiries from athletes to authority figures (governing bodies) and also to themselves.

Example 5. ‘What’ questions used in conjunction with ‘my’.

What are my options?

What if my doctor says I need to take medication that contains a banned substance?

What would my sporting hero do in the same situation?

This strategy possibly indicates an attempt to involve athletes in more advanced stages of engagement than the initial and tentative ones outlined by the scholars quoted above.

4.3. *Possible intended effects*

Presumably the repertoire of linguistic strategies described and analysed above have been chosen to influence and shape the behaviour of athletes accessing the relevant websites. Thus, the key pronominals ‘you’ and ‘your’ are extensively used to achieve ‘synthetic personalization’ (Fairclough 1989), in other words the linguistic methods used by text-producers to address anonymous and *en masse* text-receivers (in this case athletes) as if they were known to them. In this case, governing bodies and antidrug agencies communicate with athletes as if they were personally known to the organization, which itself is frequently presented as a personalized participant in the interaction.

Addressing athletes in this way is possibly meant to achieve two goals simultaneously:

- (a) It exercise power and influence because it suggests official bodies' ability to communicate directly with athletes, suggesting they are known, and knowable and that they can be monitored.

Example 6. These anti-doping rules apply to you regardless of what level you compete at.

- (b) It embodies a phatic orientation that opens an alternative channel of communication for athletes, possibly driving a wedge between athletes and their entourages who, at least in the eyes of David Howman, are quite capable of leading their young charges astray.

Example 7. Using supplements is therefore a potential risk to you using a banned substance and then testing positive.

The former effect clearly reflects a substantial commitment to interaction, at times asymmetrical, but not always so; the latter, on the other hand, is indicative of a commitment to outreach and awareness building, also reflected in the presence of the first-person pronominal references 'me' and 'my'.

Example 8. Would anyone think badly of me if I did this?

Example 9. What would my sporting hero do in the same situation?

Similarly, 'what questions' are conceivably employed to simulate interaction, but also confirm power relations between the interactants: if the addressees put the question, the organizations know the answers and in providing them confirm their authority and possibly convey an impression of infallibility:

Example 10. What if my doctor says I need to take medication that contains a banned substance?

Example 11. Tell your doctor you are an athlete and there are some medications you may not be able to take.

Overall, then, these patterns of pronominal reference appear to indicate two main kinds of interaction: (a) between organizing body and athlete (and also authority figures like parents); (b) 'between' athletes and themselves. The former frame the agencies and governing bodies either as authority figures, or as more reliable, paternalistic sources of information and knowledge; the latter presumably embody and exemplify the

processes of emerging awareness that the governing bodies are trying to instill. Thus far, then, key functional language examined is interactional and intra-actional, or reflexive, either simulating conversation between two participants, governing body and athlete, or also simulating self-questioning and the emergence of awareness about doping in the athletes themselves through a process of reflection.

5. CONCLUDING REMARKS

To return to the original issue of whether there is an overreliance among sports governing bodies and anti-drugs agencies on messages of deterrence, analysis of the role played by language in the war on drugs suggests that this, indeed, is the priority. Nevertheless, searches of key lexis and two key categories of function language suggest a significant educational orientation, both as regards the kind of information provided and how that information is conveyed, particularly through the simulation of interaction between governing bodies and agencies and athletes. The situation in this corpus of website information appears to run counter to Backhouse's (2013) categorical objection that the current anti-doping approach "is nothing more than information giving. It is not education and it is unlikely to influence the toxic cocktail of events that often lead an athlete to take their first steps into doping".

In the light of David Howman's call (see section 2.2) to educate and encourage athletes to play clean, the narrow focus of this preliminary analysis has outlined a three-pronged linguistic strategy for shaping athletes' attitudes to doping within the world of International cycling and athletics:

- a. an asymmetrical approach in which governing bodies and anti-doping agencies emphasise rules, regulations, procedures and protocols (using second-person pronominals combined with deontic (obligation) modals of varying directive force;
- b. a more interactional, symmetrical approach, achieved largely through involvement strategies, particularly through the employment of first- and second-person pronominal reference;
- c. the prominent recourse to the 'What' questions to simulate an enquiry from the addressee, and hence to encourage awareness, to which the body or agency infallibly supplies an answer, conveying at a stroke both authority and paternal availability.

It goes without saying that the present study makes no special claims for the power of language to halt the drugs scourge; it merely uses a limited repertoire of tools available on concordancing software, applied to a very circumscribed selection of some key data, to help define more accurately the terms of the ongoing controversy within the international doping community about ways and means to tackle the problem. The findings here suggest that language is not only being used as an instrument of deterrence, to govern athletes' bodies, but that it is, to a significant extent, playing an educational role meant to win their minds.

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